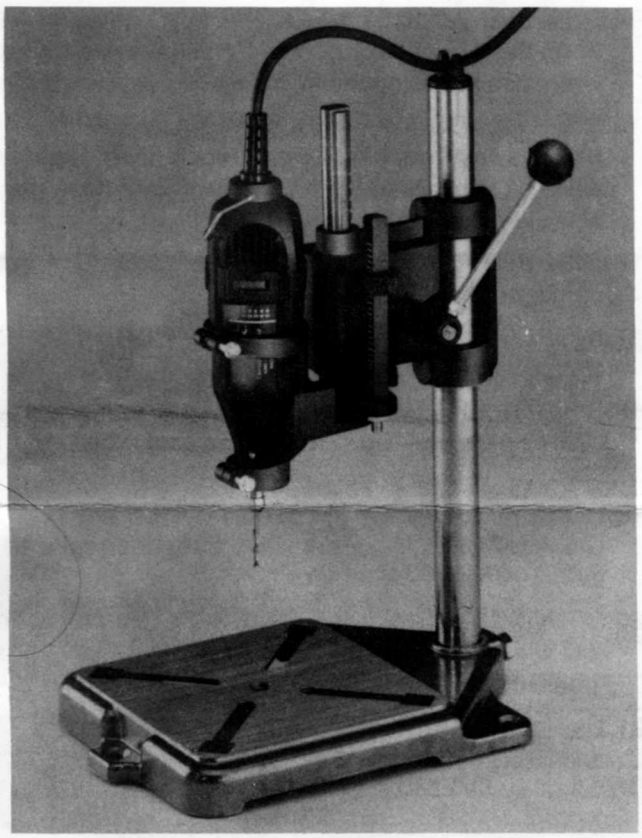
DREMEL®

Owner's Manual

MODEL 212

DRILL PRESS STAND

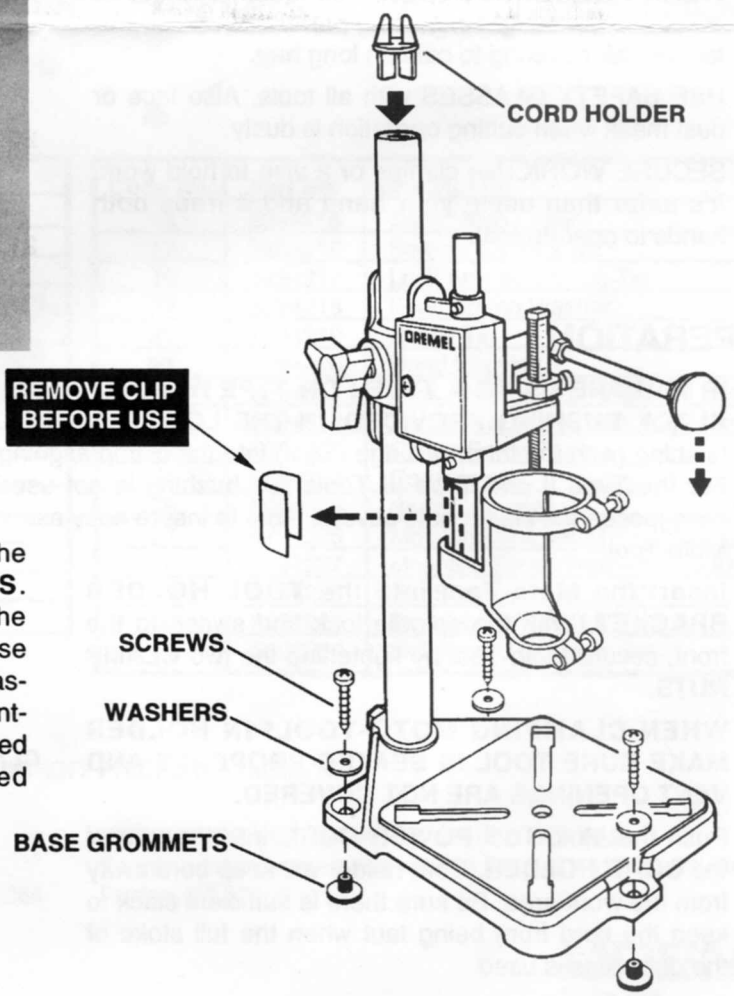
FOR USE WITH MODELS 275, 285 & 395 MOTO-TOOL®



ATTENTION:

Read entire instruction manual carefully before using your Dremel Drill Press Stand. Retain instructions for future reference. Your Dremel Drill Press Stand will convert models 395,285 and 275 Moto-Tools to a Drill Press for drilling accuracy. Moto-Tools can be assembled to or removed from the tool holder in seconds.

Metal clip around gear rack, between head housing and tool holder bracket is for packaging only.



ASSEMBLY:

The Drill Press comes assembled except for the **CORD HOLDER** and **BASE GROMMETS**. Assemble cord holder into top of column and the three grommets into **MOUNTING HOLES** of base (as shown). **SCREWS** and **WASHERS** are for fastening the base to a workbench. Tighten the mounting screws until the three grommets are compressed a little. (The grommets should be compressed equally.)

WARNING!

READ ALL INSTRUCTIONS—FAILURE TO FOLLOW THE SAFETY RULES LISTED BELOW AND THE PRECAUTIONS GIVEN IN YOUR MOTO-TOOL® OWNER'S MANUAL MAY RESULT IN SERIOUS PERSONAL INJURY.

1. KNOW YOUR POWER TOOL—Read Moto-Tool owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards peculiar to this tool.
2. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
3. AVOID DANGEROUS ENVIRONMENT. Don't use power tool in damp or wet locations or expose to rain. Keep work area well lit.
4. KEEP CHILDREN AWAY. All visitors should be kept a safe distance from work area. Do not let visitors contact tool or extension cord.
5. STORE IDLE TOOLS. When not in use, remove Moto-Tool® from stationary fixture and store in secure place - out of the reach of children.
6. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed. Use recommended speed for drill accessory and work-piece material.
7. USE RIGHT TOOL. Don't force small tool or attachment to do the job of a heavy duty tool. Don't use tool for purpose not intended.
8. WEAR PROPER APPAREL. No loose clothing or jewelry to get caught in moving parts. Also, wear protective hair covering to contain long hair.
9. USE SAFETY GLASSES with all tools. Also face or dust mask when cutting operation is dusty.
10. SECURE WORK.Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
11. DON'T OVERREACH. Keep proper footing and balance at all times.
12. MAINTAIN TOOLS WITH CARE. Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
13. UNPLUG POWER CORD. When not in use, before servicing, or when changing attachments, blades, bits, cutters, etc., unplug power cord.
14. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
15. KEEP HANDS AWAY FROM DRILLING AREA. Keep hands away from bits. Do not reach underneath work while bit is rotating. Do not attempt to remove material while bit is rotating.
16. INSPECT TOOL CORDS PERIODICALLY and if damaged, have them repaired.
17. INSPECT EXTENSION CORDS PERIODICALLY and replace if damaged.
18. STAY ALERT. Watch what you are doing and use common sense. Do not operate tool when you are tired.
19. DO NOT USE TOOL IF SWITCH DOES NO TURN IT ON AND OFF. Have defective switches replaced by authorized service center.
20. DRUGS, ALCOHOL, MEDICATION. Do not operate tool while under the influence of drugs, alcohol or any medication.
21. Use only with Dremel Moto-Tool® models 275, 285 and 395.

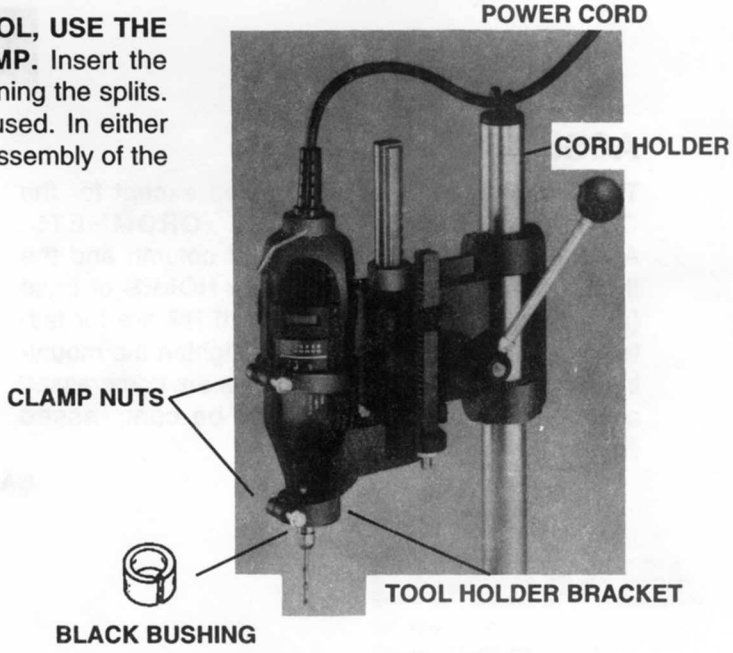
OPERATION

IF YOU ARE USING A TYPE I OR TYPE IV MOTO-TOOL, USE THE BLACK BUSHING PROVIDED, IN THE LOWER CLAMP. Insert the bushing (with the internal ledge down) into the clamp aligning the splits. For the Type II and Type III Tools this bushing is not used. In either case loosen the clamp nuts several turns to insure easy assembly of the Moto-Tool.

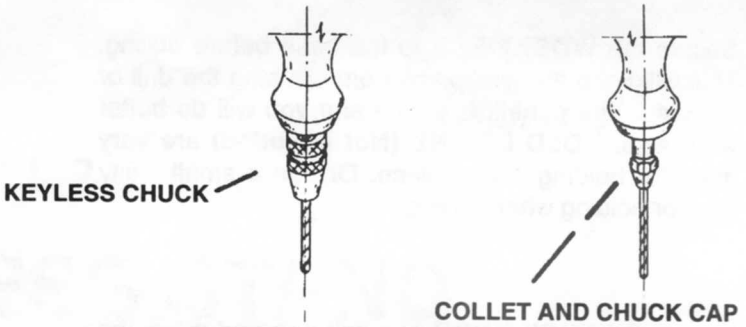
1. Insert the Moto-Tool into the **TOOL HOLDER BRACKET**. With the spindle lock and switch to the front, secure Moto-Tool by tightening the two **CLAMP NUTS.**

   WHEN CLAMPING MOTO-TOOL® IN HOLDER MAKE SURE TOOL IS SEATED PROPERLY AND VENT OPENINGS ARE NOT COVERED.

2. Push the Moto-Tool **POWER CORD** into the vee of the **CORD HOLDER.** Cord holder will keep cord away from the work area. Be sure there is sufficient slack to keep the cord from being taut when the full stoke of the drill press is used.



3. Place the drill bit you will use in the chuck or collet and secure. (A minimum of 1/2" of the drill shank should be up in the collet.) Keyless chuck will hold drills up to 1/8" diameter. Chuck is more flexible on size than collets. Dremel collets are available in 1/32", 3/32" and 1/8" diameters.



RECOMMENDED DRILLING SPEED BY SWITCH (DIAL) SETTINGS

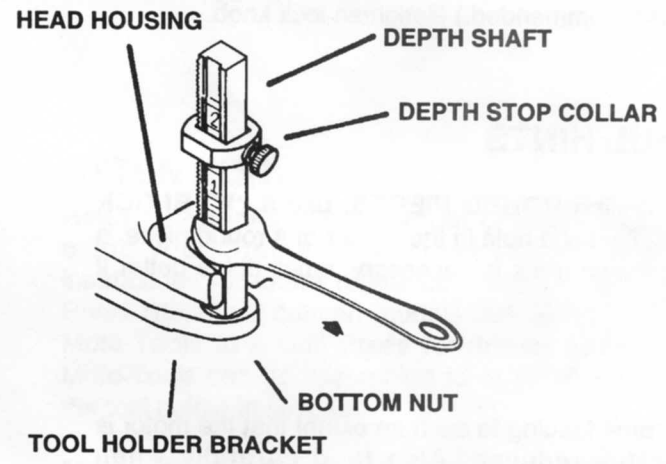
DRILL SIZE	ALUM, WOOD, BRASS		MILD STEEL		VERY HARD MATERIALS	
	*1	*2	1	2	1	2
1/64 & #80 to #74	4	4-5	3	3-4	2	3
1/32 & #73 to #61	4	4-5	3	3-4	2	3
1/16 & #57 to #50	3-4	4	2-3	3	2	3
5/64 & #49 to #45	3-4	4	2-3	3	2	2-3
3/32 & #44 to #39	3	3-4	2-3	3	1-2	2-3
7/64 & #38 to #34	3	3-4	2-3	3	1-2	2-3
1/8 & #37 to #33	3	3-4	2	2-3	1-2	2-3

* 1 Switch setting on Model 395 Variable Speed Moto-Tool.

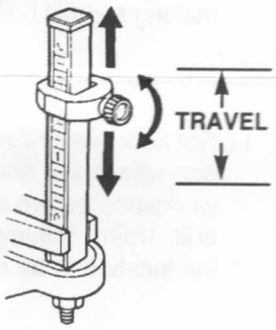
** 2 Dial setting on Cat. No. 219 Speed Control Attachment with Model 275 Single Speed Moto-Tool..

NOTE: If Model 285 2-speed Moto Tool is being used, all drilling applications should be performed at the low speed.

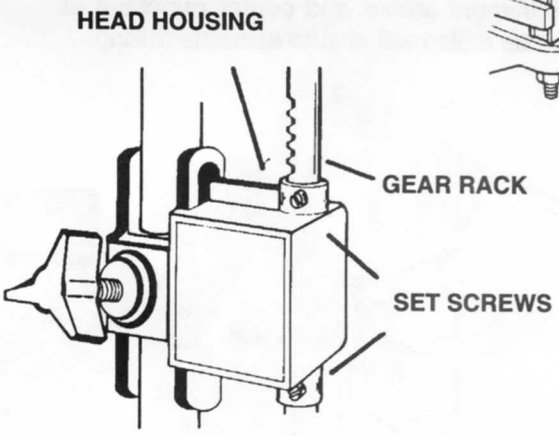
Remember, this chart is only to be used as a guide. The indicated settings are only approximate. The best option for determining speed is to experiment with a scrap piece of the material being used. Use a speed that works for you.



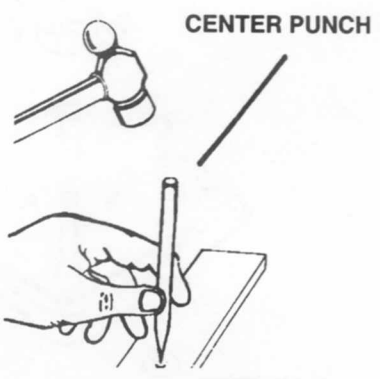
4. To eliminate side play in the **TOOL HOLDER BRACKET**, loosen the **BOTTOM NUT** on depth shaft. Turn depth shaft slightly (as shown) and retighten nut. All side play can be eliminated. Do not turn to the extent that you create excess friction between depth shaft and **HEAD HOUSING**.



Use the **DEPTH STOP COLLAR** when you wish to drill holes to a measured depth. A scale on the **DEPTH SHAFT** is provided for your convenience. Depth stop collar will insure that you can drill several holes to the same depth.

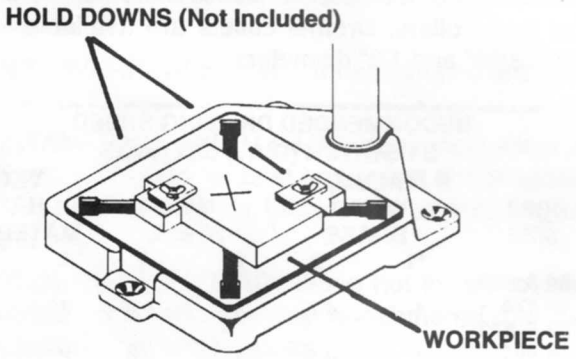


5. **SET SCREWS** are provided at top and bottom of the **HEAD HOUSING** for adjusting to a sliding feel of the **GEAR RACK**. Adjust them to the desired tension. If they are too tight, the return spring will not return the Moto-Tool to its up position. In this case, back them off **SLIGHTLY**. (1/16 of a turn will be .002)



6. Layout hole locations on the workpiece and **CENTER PUNCH** at these locations. Center punching will prevent walking of the drill point and insure proper hole location. The benefits of center punching are less drill breakage and better hole size tolerance.

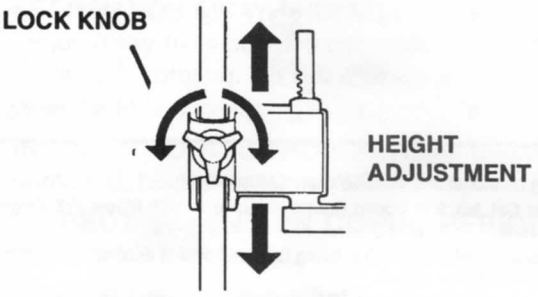
7. Secure the **WORKPIECE** to the base before drilling. This will keep the workpiece from climbing the drill or spinning. The benefit is safety and you will do better work also. **HOLD DOWNS (Not Included)** are very good for holding a workpiece. Or use a small utility vise for holding when drilling.



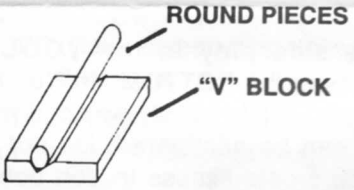
8 Loosen the **LOCK KNOB** one-half turn and move the head housing until the drill bit tip is near the workpiece. (A maximum of 1/4 between drill tip and workpiece is recommended.) Retighten lock knob.

HELPFUL HINTS

9. When drilling **ROUND PIECES**, use a **"V" BLOCK** or vise .To drill a hole in the center of a round piece, a center punch mark is necessary, small flat is better if tolerable.



10. Avoid force feeding to such an extent that the motor is noticeably reduced. Also feed carefully when approaching point of breakthrough. This will avoid making ragged breakthrough edges.



11. For accurate drilling lower the head housing to a location where the end of the drill bit is within 1/4" of the workpiece before advancing the handle for feeding the drill. Using minimum stroke and center punching at the location to be drilled will ensure accurate drilling.

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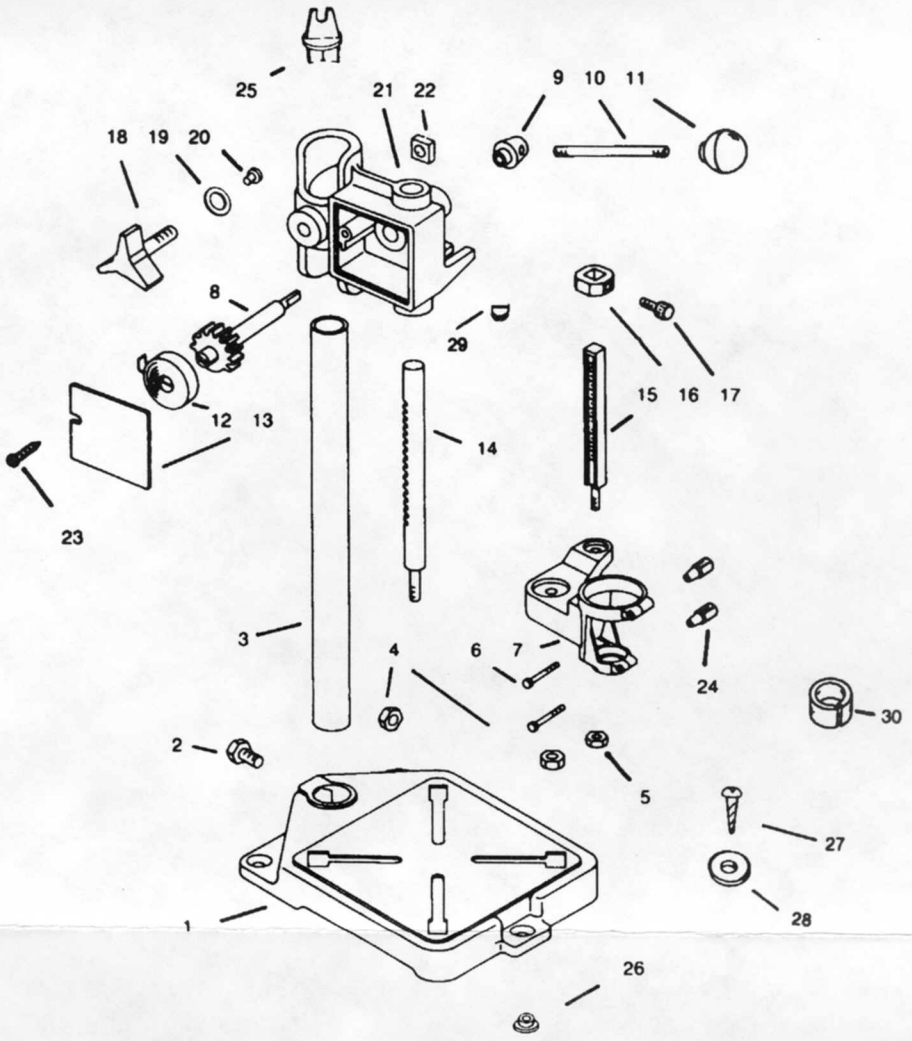

Code No.	Part No.	Description
01	5294200	Base
02	5294201	*Base Bolt 3/8-16 x 5/8 Hex
03	5294202	Column 1" x 13-1/2" x 16 Gauge
04	5294203	*Rack Nut 3/8-16 Hex Jam 2 Req'd.
05	5294204	*Depth Shaft Nut 1/4-20 Hex Jam
06	5294205	*Clamp Screw #6-32 x 1" Hex Scr. 2 Req'd.
07	5294206	Moto Tool Holder Bracket
08	5294207	Pinion Dremel
09	5294208	Tapered Collar
10	5294209	Handle Shaft (5/16-18)
11	5294210	Handle Knob
12	5294211	Pre-hard spring
13	5294212	Nameplate
14	5294213	Gear Rack
15	5294214	Depth Shaft

Code No.	Part No.	Description
16	5294215	Depth Stop Collar
17	5294216	Screws 1/4-28 x 1/2
18	5294217	Lock Arm with Nylon Tip
19	5294218	Knob Spring Washer
20	5294219	Screw Tip
21	5294220	Head Housing
22	5294221	*Lock Arm Nut 3/8-16 Square Nut
23	5294222	*Nameplate Screw #8 x 1/2" Sheet Metal
24	5294223	Clamp Screw Nut 2 Req'd.
25	5294224	Cord Holder
26	5294225	Base Grommet 3 Req'd.
27	5294226	Mounting Screws #10 x 1" Wood 3 Req'd.
28	5294227	Mounting Screw Washers 3/16 ID 3 Req'd.
29	5294228	Set Screw 10 - 32 x 1/4" 2 Req'd.
30	5297216	Bushing for Type I & Type IV
‡	5296949	Drill Press Hardware Set

*AVAILABLE IN HARDWARE STORES.

‡ NOT SHOWN - INCLUDES

5294225
5294224
5294226
5294227
5297216

WRITE FOR CURRENT PRICES-NO C.O.D.'S

UNITED STATES

Dremel Service Center, 4915 Twenty-first St., Racine, WI 53406
Dremel Service Center, 4631 E. Sunny Dunes, Palm Springs, CA 92264

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See your local distributor or write to Dremel, 4915 Twenty-first St., Racine, WI 53406

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